To: CN=David Evans/OU=DC/O=USEPA/C=US@EPA;"Randy Hill" [Hill.Randy@epamail.epa.gov]; Randy Hill" [Hill.Randy@epamail.epa.gov]
From: CN=Nancy Stoner/OU=DC/O=USEPA/C=US
Sent: Sun 11/7/2010 3:31:47 PM
Subject: Fw: WTS/Mining Loopholes
Mining Loopholes PC-Polymet Mine.doc
Mining Loopholes Pebble Fact Sheet.pdf
PredictionsComparisonsWhitePaperFINAL.pdf
Pebble Board Briefing.pptx

Pls see attached

From: Tony Turrini [turrini@nwf.org]
Sent: 11/06/2010 05:52 PM AST
To: Nancy Stoner
Subject: WTS/Mining Loopholes

Attachment 1: Two-page fact sheet on mining loopholes and Polymet Mine.

Attachment 2: Two-page fact sheet on mining loopholes and Pebble Mine.

Attachment 3: Summary of a 2006 Maest and Kuipers study finding that 76% of mines studied in detail exceeded water quality standards due to mining activity.

Attachment 4: Pebble Mine powerpoint.

Mining Loopholes and the Pebble Mine

Under the CWA, a person who discharges fill material into waters of the U.S. must obtain a section 404 permit from the Corps. Anyone who wants to discharge other pollutants into the nation's waters must obtain a section 402 permit from EPA or a state that as been delegated authority to issue such permits. In 1982, EPA adopted a zero discharge standard under section 402 for new copper and gold mines using froth-flotation, cyanidation, and similar processes. The Pebble Mine would fall into this category of mines. EPA found that mines already in operation in the early 1980s were achieving zero discharge and that it was therefore practicable for new mines to operate without discharging their wastes into waters of the U.S.

If section 402's zero discharge limitation were strictly applied, it would be extremely difficult to develop the Pebble Mine. Large mines produce huge amount of chemically-treated wastes. Typically, the most cost-effective places to store these wastes are valleys and low-lying areas near the mine site. These are also the places where the wetlands, rivers, and lakes protected by the CWA are found. Mining companies have been able to avoid complying with section 402's tough pollution limitations by using two federal regulatory loopholes that have evolved over the last 30 years.

The first loophole is found in EPA and Corps regulations which state that “waste treatment systems” are not waters of the United States. The exclusion has been used to allow mining companies to obtain a section 404 permit in order to build a dam across the mouth of a valley. Once the dam is completed, the wetlands, rivers, and lakes behind the dam are viewed as part of a waste treatment system facility and are no longer considered waters of the U.S.

The second loophole was the subject of the recent U.S. Supreme Court decision finding that EPA and the Corps had acted lawfully in authorizing the Kensington Mine in southeast Alaska to use lower Slate Lake as a tailings pond in which it could discharge slurry and other wastes. Relying upon a 2002 regulation redefining “fill,” the agencies concluded that these discharges should be treated as fill under section 404, rather than waste under section 402, because they would change the bottom elevation of Lower Slate Lake.

It is possible to "dry stack" tailings. However, the bigger the mine, the greater the quantity of chemically-treated wastes that must be permanently stored. The Pebble Mine would be the largest copper and gold mine in the hemisphere. It is estimated that the tailings impoundments for Pebble would cover at least 10 square miles and the semi-liquid slurry within the impoundments would be hundreds of feet deep. The project site is exceptionally wet with numerous small lakes, ponds, and streams connected by vast wetlands complexes. Agency staff say it is almost inconceivable that these giant tailings reservoirs could be built without impacting waters of the U.S.

Even assuming it is theoretically possible to locate the tailings impoundments so they do not destroy waters of the U.S., dry stacking would probably not be a viable option because the Pebble Mine would not be able to compete economically with other mines. The costs of mining in Alaska are already high and dry stacking at a large copper and gold mine would drive up the costs significantly. Consequently, closing the two CWA loopholes would make Pebble, as currently planned, extremely difficult to develop and probably prohibitively expensive.